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DESTRUCTIVE INSECTS.

We take the following extracts from Dr. T. W. Harris's valuable Report on the Insects of Massachusetts:—

Cucumber Bug.—The pupa state of some species occurs on the leaves—of others, in the ground; and some of the larvæ live also in the ground on the roots of plants. This is probably the case with those of the cucumber beetle. This destructive insect is the *Galeruca vittata*, or striped Galeruca, generally known here by the names of striped bug and cucumber bug. It is of a light yellow color above, with a black head, and a broad black stripe on each wing-cover, the inner edge or suture of which is also black, forming a third narrower stripe down the middle of the back; the abdomen, the greater part of the fore-legs, and the knees and feet of the other legs are black. It is rather less than one fifth of an inch long. Early in the spring it devours the tender leaves of various plants. I have found it often on those of our Aronias, *Amelanchier botryapium* and *oralis*, and *Pyrus arbutifolia*, towards the end of April. It makes its first appearance, on cucumber, squash, and melon vines, about the last of May and first of June, or as soon as the leaves begin to expand; and, as several broods are produced in the course of the summer, it may be found at various times on these plants, till the latter are destroyed by frost. Great numbers of these little beetles may be obtained in the autumn from the flowers of squash and pumpkin vines, the pollen and germs of which they are very fond of. They get into the blossoms as soon as the latter are opened, and are often caught there by the twisting and closing of the top of the flower; and, when they want to make their escape, they are obliged to gnaw a hole through the side of their temporary prison. The females lay their eggs in the ground, and the larvæ probably feed on the roots of plants, but they have hitherto escaped my researches.

Various means have been suggested and tried to prevent the ravages of these striped cucumber beetles, which have become notorious throughout the country for their attacks upon the leaves of the cucumber and squash. Dr. B. S. Barton, of Philadelphia, recommended sprinkling the vines with a mixture of tobacco and red pepper, which he stated to be attended with great benefit. Watering the vines with a solution of one ounce of Glauber's salts in a quart of water, or with tobacco water, an infusion of elder, of walnut leaves, or of hops, has been highly recommended. Mr Gourgas, of Weston, has found no application so useful as ground plaster of Paris; and a writer in the American Farmer, extols the use of charcoal dust. Deane recommended sifting powdered soot upon the plants when they are wet with the morning dew, and others have advised sulphur and Scotch snuff to be applied in the same way. As these insects fly by night as well as by day, and are attracted by lights, lighted splinters of pine knots or of staves or tar barrels, stuck into the ground during the night, around the plants, have been found useful in destroying these beetles. The most effectual preservative both against these insects and the equally destructive black flea-beetles which infest the vines in the spring, consists in covering the young vines with millinet stretched over small wooden frames. Mr Levi Bartlett, of Warner, N. H., has described a method for making these frames expeditiously and economically, and his directions may be found in the second volume of the New England Farmer, page 305, and in Fessenden's New American Gardener, under the article *Cucumber*.

The cucumber flea-beetle, above mentioned, a little, black, jumping insect, well known for the injury done by it, in the spring, to young cucumber plants, belongs to another family of the Chrysomelian tribe, called Halticadæ. The following are the chief peculiarities of the beetles of this family. The body is oval and very convex above; the thorax is short, nearly or quite as wide as the wing-covers behind, and narrowed before; the head is pretty broad; the attennæ are slender, about half the length of the body, and are implanted nearly on the middle of the forehead; the hindmost thighs are very thick, being formed for leaping; hence these insects have been called flea-beetles, and the scientific name *Haltica*, derived from a word signifying to leap, has been applied to them. The surface of the body is smooth, generally polished, and often prettily or brilliantly colored. The claws are very thick at one end, are deeply notched towards the other, and terminate with a long curved and sharp point, which enables the insect to lay hold firmly upon the leaves of the plants on which they live. These beetles eat the leaves of vegetables, preferring especially plants of the cabbage, turnip, mustard, cress, radish, and horse-radish kind, or those, which, in botanical language, are called cruciferous plants, to which they are often exceedingly injurious. The turnip fly, or more properly turnip flea-beetle, is one of these *Halticas*, which lays waste the turnip fields in Europe, devouring the seed leaves of the plants as soon as they appear above the ground, and continuing their ravages upon new crops throughout the summer. It is stated in Young's Annals of Agriculture, that the loss in Devonshire, England, in one season, from the destruction of the turnip crops by this little insect, was estimated at one hundred thousand pounds sterling. Another small flea-beetle is often very injurious to the grape vines in Europe, and a larger species attacks the same plant in this country. The flea-beetles conceal themselves during the winter, in dry places, under stones, in tufts of withered grass, and in chinks of walls. They lay their eggs in the spring, upon the leaves of the plants upon which they feed. The larvæ or young of the smaller kinds, burrow into the leaves, and eat the soft pulpy substance under the skin, forming therein little winding passages, in which they finally completely their transformations. Hence the plants suffer as much from the depredations of the larvæ, as from those of the beetles—a fact that has too often been overlooked. The larvæ of the larger kinds are said to live exposed upon the surface of the leaves which they devour, till they have come to their growth, and to go into the ground, where they are changed to pupæ, and soon afterwards to beetles. The mining larvæ, the only kinds which are known to me from personal examination, are little slender grubs, tapering towards each end, and provided with six legs. They arrive at maturity, turn to pupæ, and then to beetles in a few weeks. Hence there is a constant succession of these insects, in their various states, throughout the summer. The history of the greater part of our Halticas or flea-beetles, is still unknown; I shall, therefore, only add, to the foregoing general remarks, descriptions of two or three common species, and suggest such remedies as seem to be useful in protecting plants from their ravages.

The most destructiue species in this vicinity, is that which attacks the cucumber plant as soon as the latter appears above the ground, eating the seed leaves, and thereby destroying the plant immediately. Supposing this to be an undescribed insect, I formerly named it *Haltica Cucumeris*, the cucumber flea-beetle; but Mr Say subsequently informed me that it was the *pubescens* of Illiger, so named because it is very slightly pubescent or downy. It is only one sixteenth of an inch long, of a black color, with clay-yellow antennæ and legs, except the hindmost thighs, which are brown. The upper side of the body is covered with punctures, which are arranged in rows on the wing-cases; and there is a deep transverse furrow across the hinder part of the thorax.

The wavy-striped flea-beetle, *Haltica striolata*, may be seen in great abundance on the horse radish, various kinds of cresses, and on the mustard and turnip, early in May, and indeed at other times throughout the summer. It is very injurious to young plants, destroying their seed leaves as soon as the latter expand. Should it multiply to any extent, it may, in time, become as great a pest as the European turnip flea-beetle, which it closely resembles in its appearance, and in all its habits. Though rather larger than the cucumber flea-beetle, and of a longer oval shape, it is considerably less than one tenth of an inch in length. It is of a polished black color, with a broad, wavy, buff-colored stripe on each wing-cover, and the knees and feet are reddish yellow. Specimens are sometimes found having two buff-yellow spots on each wing-cover, instead of the wavy stripe. These were not known by Fabricus, to be merely varieties of the *striolata*, and accordingly he described them as distinct, under the name of *bipustulata*, the two-spotted.

In England, where the ravages of the turnip flea-beetle have attracted great attention, and have caused many and various experiments to be tried with a view of checking them, it is thought that "the careful and systematic use of lime will obviate, in a great degree, the danger which has been experienced" from this insect. From this and oth-

er statements in favor of the use of lime, there is good reason to hope that it will effectually protect plants from the various kinds of flea-beetles, if dusted over them, when wet with dew, in proper season. Watering plants with alkaline solutions, it is said, will kill the insects without injuring the plants. The solution may be made by dissolving one pound of hard soap in twelve gallons of the soap-suds left after washing. This mixture should be applied twice a day with a water-pot. Kollar very highly recommends watering or wetting the leaves of plants with an infusion or tea of wormwood, which prevents the flea-beetles from touching them. Perhaps a decoction of walnut leaves might be equally serviceable. Great numbers of the beetles may be caught by the skilful use of a deep bag-net of muslin, which should be swept over the plants infested by the beetles, after which the latter may be easily destroyed. This net cannot be used with safety to catch the insects on very young plants, on account of the risk of bruising or breaking their tender leaves.

TREATMENT OF FLY-BLOWN SHEEP.

When the sheep is fly-blown, dislodge the maggots with a knife, and shake a little powdered white lead into the wound. Do not apply tar to the abraded surface, as, from its cauterizing effects, the wound will be enlarged, and a repetition of the visit speedily ensured. To ward off the onset of the flies, various substances noxious to them are rubbed or poured upon the wool. Tar, in small quantities, and of pungent quality, is by some daubed upon the ears, horns and tail. Others prefer rubbing a little melted butter, thickened by flour of sulphur, along the sheep's back: this is an effectual preventive. Some, again, prefer dressing the sheep, when in low situations, with the following recipe: "Take of arsenic, finely pounded, one pound; potash, twelve ounces; common yellow soap, six ounces; rain or river water, thirty gallons. Boil the ingredients together for fifteen minutes. The liquid is in no degree injurious to wool. It cleans and dries the offensive perspiration of the sheep, and destroys the smell caused by the dew in the mornings, or by damp hot weather. In most situations, one dressing in July and another in August will suffice; but as the expense is trifling, and the process simple, it may be better to apply it more frequently, especially in low and damp situations." The liquid is applied only in dry weather. A teapot, or any vessel of a similar form, is filled with it, and one person pours it on the wool, while another rubs the fleece to facilitate the passage of the fluid. At the times of using the solution, all superfluous wool ought to be shorn from the buttocks, but not too closely.

When the insects are very troublesome, drive the sheep if possible to higher ground. Examine carefully all wounds and ulcers, however trifling, and dress them with any simple ointment containing a small proportion of sulphur, mercury, or white lead. Lastly, bury all useless carcasses as speedily as possible, by which means you will keep down the number of the flies.

Ticks are destroyed or stopped in their attacks boy the same remedies and preventives detailed in the preceding paragraphs on the fly.—*Blacklock's Treatise.*

N. E. Rum and tobacco smoke likewise, will kill the tick.—Ed. N. E. F.

LOVE OF THE COUNTRY AND ITS OCCUPATIONS.

To the traveller, what can be more interesting than to observe the industrious and enterprising farmer building neat, comfortable houses, and preparing his lands to bring forth an abundant crop? Or, on the other hand, what more discouraging and disagreeable, than to see every thing on the decline—houses rotting down for want of care, fences levelled, and the fields grown up with briars and bushes? We easily form a correct idea of a man's pride, judgment or industry, by observing the construction and order of his farm; for we find at every step something that excites our admiration in the pursuit of the delightful employment, or we meet with something so disagreeable, that, for a moment we feel inclined to abandon altogether a business that seems so ill calculated to enlist our energies either of body or mind. That farm in the distance! it presents an appearance of total ruin, and we might think it deserted, were it not for the smoke arising from the chimney. We must climb the fence to get into the yard, and stumble over a pile of boards, or rails which lie rotting, before we can reach the house, stoop down as we enter the door, or our hat is taken off; then look around upon the uncomfortable apartment, fast becoming more so, for the want of a nail or two here, and some plaster there. Outside we see heaps of all sorts of rubbish lying about—tools without shelter—outbuildings worse than miserable—fences ditto. Such being the confusion of the whole place, we should look in vain were we to endeavor to discover its comforts.

Now, are such things as these calculated to allure the young to the pursuit of agriculture? Do not such scenes rather lead us to form, even while looking upon them, a distaste for an occupation which, if correctly followed, affords sweeter enjoyments than any other? By good management, every man can yield a mighty influence, by making valuable and convenient improvements upon his farm: he thus makes his land more productive, he saves labor and time, and excites his neighbor to order and industry; cultivates his own taste; sets a noble example to his children; secures to his family a thousand blessings; and increases the sources of his own pleasures,—*Western paper.*

Parental Example.—Example is a living lesson. The life speaks. Every action has a tongue. Words are but articulated breath. Deeds are the fac similes of soul: they proclaim what is within. The child notices the life. It should be in harmony with goodness. Keen is the vision of youth: every mask is transparent. If a word is thrown into one balance, a deed is thrown into the other. Nothing is more important than that parents should be consistent. A sincere word is never lost. But advice, *counter* to example, is always suspected. Both cannot be true—one is false. Example is like statuary. It is sculptured into form. It is reality. The eye dwells upon it; the memory recalls it; the imagination broods over it. Its influence enters the soul. Parental example becomes incorporated with the child's understanding. He cannot forget it if he would. If it is good, it blesses: if it is bad, it tyrannizes. The parent may die, his example cannot. Let life, then, be an unblemished picture—a consistent whole.—*Selected.*

There is no quality which commands more respect than *integrity.*

"THE BOOK OF THE FARM."

By Henry Stephens, Editor of the Quarterly Journal of Agriculture.

Seeing the above work advertised by Blackwood & Sons, Edinburgh, we sent out for a copy, presuming that its author would furnish something interesting if not instructive, that might be laid in scraps before Yankee Farmers. But we have been wofully disappointed. Four numbers out of the twelve have reached us, and they are barren of all instruction that can be available here, beyond what we had conceived possible. Thinking it probable that mere curiosity to learn a little concerning the classes of laborers on an English farm of hundreds of acres, may help our readers to bear with a few extracts, we copy the following accounts of *a plowman, field worker, and dairymaid.*

The Plowman.—"The duties of a *plowman* are clearly defined. The principal duty is to take charge of a pair of horses, and work them at every kind of labor for which horses are employed on a farm. Horse-labor on a farm is various. It is connected with the plow, the cart, sowing-machines, the roller, and the thrashing-mill, when horse power is employed in the thrashing of corn; so that the knowledge of a plowman should comprehend a variety of subjects. In the fulfilment of his duties, the plowman has a long day's work to perform; for, besides expending the appointed hours in the fields with the horses, he must groom them before he goes to the field in the morning and after he returns from it in the evening, as well as at mid-day between the two periods of labor. Notwithstanding this constant toil, he must do his work with alacrity and good will; and when, from any cause, his horses are laid idle, he must not only attend on them as usual, but must himself work at any farm-work he is desired. There is seldom any exaction of labor from the plowman beyond the usual daily hours of work, these occupying at least twelve hours a day for 7 months of the year, that being a sufficient day's work for any man's strength to endure. But occasions do arise which justify the demand of a greater sacrifice of his time, such as seed-time, hay-time, and harvest. For such encroachments upon his time, many opportunities occur of repaying him with indulgence, such as a cessation from labour, especially in bad weather. It is the duty of the plowman to work his horses with discretion and good temper, not only for the sake of the horses, but that he may execute his work in a proper manner. It is also his duty to keep his horses comfortably clean. Plowmen are never placed in situations of trust, and thus, having no responsibility beyond the care of their horses, there is no class of servants more independent. There should no partiality be shewn by the master or steward to one plowman more than to another, as it is the best policy to treat all alike who work alike. An invidious and reprehensible practice exists, however, in some parts of the country of setting them to work in an order of precedency, which is maintained so strictly as to be practised even on going to and returning from work, one being appointed *foreman*, whose movements must guide those of the rest. Should the foreman prove a slow man, the rest must not go a single bout more than he does; and if he is active, they may follow as best they can. Thus, whilst his activity confers no benefit to the farmer beyond its own work, his dullness discourages the activity of the others. This consideration alone should be

sufficient ground for farmers to abolish the practice at once, and put the whole of their plowmen on the same footing. I soon saw the evils attending the system, and put an end to it on my own farm. When one plowman displays more skill than the rest, it is sufficient honor for him to be intrusted to execute the most difficult pieces of work; and this sort of preference will give no umbrage to the others, as they are as conscious of his superiority in work as the farmer himself can possibly be. The services of plowmen are required on all sorts of farms, from the carse-farm to the pastoral, on on which the greatest and the least portion of arable culture are practised.

Field workers.—*Field-workers* are indispensable servants on every farm devoted to arable culture. They mostly consist of young women in Scotland, but more frequently of men and boys in England; and yet, there are many manual operations much better done by women than men. In hand-picking stones and weeds, in filling drains, and in barn work, they are far more expert, and do them more neatly, than men. The duties of field-workers, as their very name implies, are to perform all the manual operations of the fields, as well as those with the smaller instruments, which are not worked by horses. The *manual* operations consist chiefly of cutting and planting the sets of potatoes, gathering weeds, picking stones, collecting the potato crop, and filling drains with stones. The operations with the smaller instruments are pulling turnips and preparing them for feeding stock and storing in winter, performing barn-work, carrying seed-corn, spreading manure upon the land, hoeing potatoes and turnips, and weeding and reaping corn-crops. A considerable number of field-workers are required on a farm, and they are generally set to work in a band. They work most steadily under superintendence. The steward, the hedger, or cattle-man, should superintend them when the band is large; but when small, one of themselves, a staid person, who is capable of taking the lead in work, may superintend them well enough, provided she has a watch to mark the time of work and rest. But field-workers do not always work by themselves; being at times associated with the work of the horses, when thy require no particular superintendence. On some farms it is considered economical to lay the horses idle, and employ the ploughmen at their labors rather than engage field workers. This may be one mode of avoiding a little outlay of money; but there is no true economy in allowing horses "to eat off their own heads," as the phrase has it; and besides, ploughmen *cannot* possibly do light work so well as field-workers. In manufacturing districts field-workers are scarce; but were farmers generally to adopt the plan of employing a few constantly, and hire them for the purpose by the half-year, instead of employing a large number at times, young women would be induced to adopt field-labor as a profession, and become very expert in it. It is steadiness of service that makes the field-workers of the south of Scotland so superior to the same class in other parts of the country.

The Dairy Maid.—The duties of the *dairy-maid* are well defined. She is a domestic servant, domiciliated in the farm-house. Her principal duty is, as her name implies, to milk the cows, to manage the milk in all its stages, bring up the calves, and make into butter and cheese the milk that is obtained from the cows after the weaning of the calves. The other domestics generally assist her in milking the cows and feeding the calves, when there is a large number of both. Should any lambs lose their mothers, the dairy maid should bring them up with cow's milk until the time of weaning, when they are returned to the flock. At the lambing season, should any of the ewes be scant of milk, the shepherd applies to the dairy-maid to have his bottles replenished with warm new milk for the hungered lambs. The dairy-maid also milks the ewes after the weaning of the lambs, and makes cheese of the ewe-milk. She should attend to the poultry, feed them, set the brooders, gather the eggs daily, take charge of the broods until able to provide for themselves, and see them safely lodged in their respective apartments every evening, and let them abroad every morning. It is generally the dairy maid, when there is no housekeeper, who gives out the food for the reapers, and takes charge of their articles of bedding. The dairy-maid should be an active, attentive, and intelligent person."

From the Farmer's Cabinet.

CASKS FOR PRESERVING GRAIN.

MR. EDITOR—On a late visit to a branch of the Cooper family, New Jersey, I observed that the granary, or place for stowing away grain of different descriptions, was fitted up with binns in the shape of very large and strong iron-bound casks of the usual shape; and in these, the wheat, &c. was preserved for any period, no matter how long, without fear of weevil, grain-worm, or any other species of vermin, or damp and mouldiness; the grain being introduced by means of a funnel through the bung-hole, which, when the cask is full, is very carefully closed and made air-tight, the hoops being driven occasionally to cause them to become so. Now by this very simple arrangement, the whole crop of grain on a farm may be preserved for years, as perfectly free from dampness or disease of any kind, as though it had been kiln-dried; the convenience of stowage being as great as in open binns; the casks standing on low tressels or sleepers, admitting a bushel measure under, they can be rolled on to the bung; or the grain might be drawn off by a large tap made for the purpose.

By these means, we see how perfectly free from injury of any description could grain and seeds of every kind be brought by shipping from any part of the world; it is but to enclose them in stout air-tight casks instead of boxes, bags, or loose barrels, and no injury need be apprehended from the heat of the hold or the leakage of the vessel. I declare it seems wonderful that this mode of packing has not been universally adopted; the simplicity of the arrangement must be the cause of its having been overlooked. And this mode of packing would be efficient in the preservation of many other articles, which, if too bulky for admission through the bung-hole, could be performed by removing one of the heads and replacing it when the cask was full, seeing that the hoops were driven so as to insure perfect closeness. Thus might fruit-trees, flowers, and fruit itself, be preserved during long voyages, and we could be supplied with the choicest specimens of either, from the most distant parts of the globe. I very well remember that when Mr. Zollikofer received his remarkably fine sample of seed cone wheat from England the last year, that it smelt very musty, and handled wet and clammy in the bags in which it had been shipped; exhibiting every sign of having undergone fermentation during the passage: and I find, upon inquiry, that a large portion of the seed did not vegetate when sown in the autumn, the failure arising, no doubt, from this cause. And this leads to the question, is not the almost proverbial ill success attending the growing crops of beets, &c., from imported seed, to be thus accounted for, the general mode of packing for ship-board being in loose barrels or bags, exposed to the damp and putrid atmosphere of the hold of the vessel—which is often leaky—during a passage of sometimes 80 or 90 days? All which evil could be prevented by merely packing in perfectly air-tight casks—a consideration of very great moment, but one that by its simplicity will be very apt to be disregarded, like many other things of the greatest and most vital importance.

KICKING COWS.

A writer in the Farmers' Cabinet, upon dairy cows, says:

"I have found a cure for this *kicking* disorder, in its most desperate state. It is merely to place the patient in a stall with a beam over head, and fixing a running noose over her horns, throw the end of the rope over the beam and pull away, so as to raise her head pretty high in the air, but not so as to lift her legs from the ground: in this position she will not only be disabled from kicking, but will give down her milk without the least hesitation.

Hoof-ail and Sore Teats.—Cows are also liable to the hoof-ail, as well as sore teats, both of which are easily cured by the application of white paint laid on with a small brush; the body of the paint acting mechanically in preventing the action of the air on the sores, and the lead operating chemically or medicinally in drying and healing them. Care must however be taken not to apply the lead to the teats while they are suckling calves; and afterwards caution must be used at the time of milking, but no danger need be apprehended in the hands of careful persons. In inveterate hoof-ail it might first be necessary, either to cauterize the sore, or dress with blue stone, after which, and in all slight affections, white-lead dressing—in other words, painting the sores will be found sufficient to effect a cure."

The above prescription may be valuable—but we have had no experience to warrant our commending it.—ED.

Mildew on Gooseberries.—To keep off mildew (some writer says) train your bushes so as to admit a free circulation of air through them; manure about the roots, and forget not to sprinkle them freely with soap-suds before blossoming.

Man brings upon himself a thousand calamities, as consequences of his artifices and pride, and then, overlooking his own follies, gravely investigates the origin of what he calls evil.

"De conkrekation will pleeshe sing de von dousanth and two'th psalm," said a Dutch parson. "There are not so many in the book," said the chorister. "Vell, den, pleeshe to sing so many as tare pe."

Man *proposes*, but God *disposes*.

IMPROVEMENT OF THE SOIL BY FALLOW CROPS, &c.

"The fallow time," says Liebig, "is that period of culture during which land is exposed to a progressive disintegration by means of the influence of the atmosphere, for the purpose of rendering a certain quantity of alkalies capable of being appropriated by plants."

By fallow crops is meant the raising of some crop on green sward while the turf is decaying, instead of allowing the land to remain a naked fallow during this process.

The object then of fallows, is to procure the decay of vegetable matters, and the abstraction of alkalies from the mineral portions of the soil.

Naked fallows accomplish both of these objects, and have been long practiced both in this country and in England. The practice with us has been to plow up grass lands in June or July, and after cross-plowing and harrowing, to sow with winter grain in September or October. In England the land was formerly plowed in the fall, and worked over during the following summer. In both cases one crop is lost; but, though naked fallows answer the intended purpose tolerably well, they are now abandoned by every intelligent farmer on both sides of the water; with the exception perhaps of wet stiff clays, which are ameliorated by exposing the naked furrows to the frosts of winter. The evils of the system are more than equivalent to the benefits. The labor is much increased, one crop is lost, and the vegetable matters are dissipated, by their exposure to the air during the process of working the land.

Fallow crops, on the other hand, avoid these evils, and secure greater benefit both to the soil and the crop.

Process.—To prepare the soil for a fallow crop, all that is needed is to plow the green sward and roll it down; then, after harrowing thoroughly, the seed should be sown upon the inverted furrows, either in the spring or fall. If the land is stiff and wet, the autumn is preferable; if light and dry, the spring is the best season.

The *utility* of fallow crops, instead of naked fallows, may be shown by reference to the influence of growing vegetables upon the soil. The elimination of alkalies and decay of vegetable matter are, as we have said, the only objects of fallows.

It may easily be shown, that both of these ends are much better attained by tilling the fallow land; for,

1. The alkalies are furnished in greater abundance by this process. It matters not whether the land is covered by woods, or with some crop which will take up but few alkalies, such as potash and phosphates. Now it is found that several leguminous plants will grow upon a soil, and will abstract from it but a minute portion of alkalies. The "Windsor bean (*vicia faba*) contains no free alkalies, and only one per cent. of the phosphates of lime and magnesia." (*Einhof.*) "The kidney bean (*phaseolus vulgaris*) contains only traces of salts." (*Braconnot.*) "The stem of lucern (*medicago sativa*) contains only 0.83 per cent., that of the lentil (*ervum lens*) only 0.57 of phosphate of lime with albumen." (*Crome.*) "Buckwheat, dried in the sun, yields only 0.681 per cent. of ashes, of which 0.09 parts are soluble salts." (*Liebig.*) Hence these plants and with others, have been called fallow crops. It will be perceived that the alkalies which the oxygen and carbonic acid of the air are eliminating from the soil, will be increased in this case, because the roots of the crop will permit these agents to act with greater power.

The power of growing plants to decompose the rocks, and to eliminate alkalies, has already been frequently referred to; and as but a small quantity of alkali is removed by the fallow crop, the amount in the soil is, upon the whole, increased.

2. It is further evident, that the roots leave in the soil *nearly* as much vegetable matter as is carried away in the stalks and grain. This deficiency is made up by the influence of growing plants upon the humus of the soil. There is little doubt, but that decay proceeds much more rapidly when the soil is tilled, than when it is not; and the reason is, the galvanic agency of the roots and the facility which they offer for the introduction of air and water, by loosening the soil, tend powerfully to hasten the decay of humus, or to convert the vegetable matters into vegetable food. The fermentation of the sod will be more complete when it is turned in deep, and the gaseous products will be retained by the superincumbent earth; hence we may draw an argument for deep plowing, and for letting the sod remain until it has completely passed through the fermenting process.

Turning in Green Crops.—The turning in of green crops, has long been a reputed source of rendering barren soils fertile. It is well suited to any soil which requires either to be rendered lighter, or to be filled with vegetable matter and salts. Light sandy soils, such as pine barrens and loams which have been exhausted by a long course of cropping without manuring, are most benefited, while stiff clays are rendered much warmer and more friable.

Processes.—1. Green crops may be sown for the purpose and turned in, either before the seed ripens (in which case two crops may be turned in the same season,) or after the crop is nearly ripe. In the first case, before the ripening of the seed, the plant derives most of its substance from the atmosphere; but when the seeds are maturing, it draws directly upon the matters in the soil. Some experiments have been made to decide which course is best, and they incline to the dry crop. If but one crop is to be added to the soil, this would be the best process, because it adds a greater amount of salts and humus; but two green crops are better than one dry crop. Buckwheat and oats answer well for this purpose.

2. But the better course is to save the crop by sowing clover with other grain, and the next spring turn it in; and, having rolled it down, plant directly upon the furrows with potatoes and corn. The surface then should be tilled with the cultivator or hoe, so as not to disturb the sod. Some recommend, in this case, to spread a light covering of compost manure, lest the soil should be too much exhausted by the crop.

Now it is found that the quantity of vegetable matters added to the soil by this process, will exceed 12 tons to the acre. Elias Phinney, Esq., of Lexington, has actually weighed the vegetable matter in a cubic foot of green sod, from which he made an estimate that one acre contained more than 13 tons!

The best time for turning in green crops, or breaking up green-sward (unless the soil is a stiff clay,) is the spring and early part of summer; because the sod will become rotted before winter, and will not afford, as it otherwise might, a shelter for worms, during that season, ready to injure the succeeding crop.

Theory.—The theory of this process is exceedingly simple. It is evident that what is taken from the soil must be returned to it, or the land will be impoverished. We have seen that salts and geine are removed. This process simply restores them:

1. The green crop being buried deeply in the ground, soon begins to ferment and decay; a large quantity of organic food is thus added to the soil. But humus or geine is not the only substance required by plants. They must have alkalies.

2. These are supplied in part by the influence of the atmosphere, the ordinary process of disintegration. But this is trifling compared with

3. The galvanic effect of the living plant. The agency of growing plants has hitherto been overlooked in this connection. As the roots form a galvanic battery with the soil, they become the most powerful decomposing agents. Now we know that the poorest soils (the pine-barrens) contain a large quantity of alkalies, potash, lime, etc. locked up in the rocks. These are drawn into the organs of plants, where, as soon as covered with earth, they exist in a fit state to nourish future crops. If then, we can make a plant grow at all upon such soils, we can render them fertile by turning in green crops, and thus furnishing the requisite amount of geine, alkalies and salts. If the soil is too barren to produce plants, a small coating of ashes will give a start to the green crop, and then the soil may soon be rendered fertile.

In case of clayey soils, the turning in of green crops not only restores what is exhausted by tillage, but renders the texture much better fitted for the roots of plants, and the soil itself a better retainer of heat.

In case of dry, gravelly soils, the additional vegetable matter gives the power of absorbing moisture and equalizing the heat; hence, it protects the plant from the extremes of dry and wet seasons.

The importance of this mode of improvement is not fully felt by our farmers. By sowing a few pounds of clover seed with his grain crops, the farmer may be constantly augmenting the fertility of his soil without the loss of a single crop; and even if his lands rest a year, and all their produce is given back to them, they will more than return it in a few years, by the larger quantity and better quality of their productions.

It will be seen that fallow crops and the turning in of green crops, are somewhat similar in their influence upon the soil. The object in both cases is to obtain alkalies or salts and geine. Fallow crops yield mostly the former, green crops principally the latter; and by both processes taken together, a soil may be rendered very fertile, without the addition of manures; especially for crops not requiring much nitrogen.—*Gray's Scientific and Practical Agriculture.*

From the same.

ROOT CULTURE.

Root culture is not only an important means of improving the soil in a rotation system, but the products are the most valuable means of feeding and fattening cattle, and of producing manure. "It trebles," says Judge Buel, "the amount of cattle food, and doubles the quantity of manure. It moreover may be made to supply a large amount of human food."

The principal roots suited to our climate, are the potato, turnip, carrot, beet, and those usually cultivated in our gardens. Of these the potato has

come into general use. The beet, carrot and the Swedish turnip are the most profitable, both as to their influence upon the soil, and for the value of their products. The English turnip is very valuable for an after-crop, and tends to increase the fertility of the soil, especially if cattle and sheep are turned into the field, and allowed to feed upon them. This means of fertility and of producing a large and valuable quantity of fall or after feed, is almost wholly neglected by our farmers. How easy it would be, after wheat or winter rye, to sow say about the twentyfifth of July, with turnips, and in October a good supply of feed would be furnished for the farm stock.

In the cultivation of root crops more attention must be paid to the character of the soil and to its condition, than for the cultivation of grain crops, and hence it is that many farmers who have tried the beet and ruta baga have failed, by not attending to the proper conditions; but if the conditions are adhered to, the crop is as certain, and much more profitable than grain crops. We will now proceed to point out the requisite conditions for root culture, with the theory of the action upon the soil. Attention must be paid to the following particulars.

1. *The Soil.*—This should not be too light and sandy, nor too stiff and clayey; a light deep loam or alluvial soil is best adapted to this crop. If the soil is wet, that is, if water is suffered to repose upon the subsoil, the roots will be injured and the crop fail. The soil should be dry, but not subject to drought. *Depth* of soil is a necessary requisite for beets and ruta bagas, in order that the roots may have full liberty to penetrate as far as needful for their perfection.

2. *A rich soil* is another requisite to success. This is desirable for all kinds of grain, but especially for root culture; for although roots do not draw upon soil like grain crops, still there must be abundant food present, in order to give them that quality and perfection which makes them profitable crops. It may be that there is something in the constitution or vital powers of these plants, which renders a large quantity of nourishment necessary to their support. They may not possess the power of collecting food, like other plants; they cannot gather up the nutriment so readily, and hence must be fed with richer food. The soil must be *finely* pulverized, and, so far as is practicable, freed from stones. This is necessary in order that the roots may not be obstructed; finally, they should be kept free of weeds. The ground should be stirred with the cultivator and hoe. If sowed in rows, as they should be, this may be easily attended to with the plow and cultivator, without the necessity of resorting to the hoe more than once in the season.

Theory of the Action of Roots upon the Soil.—1. They divide it better than most crops. 2. They deepen the soil by their roots; and 3. return to the soil a larger amount of manure than other crops.

Three acres of grass, at two tons per acre, will give less than 9000 lbs. to the cattle yard, while one acre of ruta baga or beets, will give 36,000 lbs. or more than four times as much as the three acres of grass land. It would, therefore, be economy for the farmer to raise roots merely for manure. But the one acre of ruta baga or beets (600 bushels,) are nearly equal to three acres of hay, as food for farm stock; hence the modes by which roots improve the soil, are dividing and deepening it, furnishing a larger supply of food, which enables the farmer to keep a larger farm stock, by which the quantity of manures is increased. Manure is the great source of fertility. In proportion, therefore, as root culture is made a part of a rotation system, we should expect the soils to increase in fertility.

From the New Genesee Farmer.

CULTIVATION OF RUTA BAGA.

Mr Editor—Having by experience convinced myself that ruta baga and mangel wurtzel can be grown successfully in this country, I shall be happy if any thing I can say, may be the means of causing them to be more generally cultivated. Various reasons I have heard assigned by intelligent farmers why they do not cultivate roots. But when I call to mind that in the old country I have heard similar reasons assigned by farmers, who now grow turnips as extensively as their neighbors, I do not despair of seeing root cultivation much increased in this country. Of course, with our severe winters, it would not be profitable to grow roots to the same extent as in England, but every farmer might grow a few. The objections urged are, either that the soil is not adapted to the crop, or the flies eat up the plants, or the grasshoppers destroy them, or it requires too much trouble and expense. With regard to the non-adaptation of the soil, the plea is reasonable, but I feel confident that even this difficulty may be surmounted. In reading an account of an agricultural meeting in Shropshire, in a late English paper, I perceive that the premium for the best crop of Swede turnips or ruta baga, was awarded to a farmer occupying a very stiff clay farm, and the judges remarked that they had never seen a better crop. As the mode of cultivation of this crop was stated to be novel, the grower was requested to explain his plan to the meeting. The novelty consisted in manuring and ridging his land in the fall, instead of the spring. Consequently, his stiff soil would be mellowed by the winter's frost. The account which I saw, did not enter into particulars, but I think it would be advisable before sowing on the old plowed ridges, to draw a very light harrow along them to gain fresh soil for the seed, and also to destroy any weeds that may have sprung up. I have seen a branch of a tree used for this purpose: it would be less likely to disturb the manure.

As to flies, I have had my share, but they have never seriously injured my crop. I find the best remedy is to work your land fine by rolling and harrowing, have it in high condition, sow seed enough for the flies and yourself, and soon after the plants are up, to sow plaster or ashes over them. Grasshoppers I have found more troublesome and vexatious than flies. Last year, after my plants had been hoed out to their proper distances, and when I considered them secure from all enemies, I perceived some of the plants drooping, and on examining them I discovered that the bulbs were gnawed all round. I rooted amongst the earth all about the plant, but could not discover the aggressor. At length suspicion fell on the grasshoppers: I watched them closely, and detected them in the act. I then waged a war of extermination against them. I and another person, with sticks, killed or routed every grasshopper in a field of about two acres. I wish, Mr Editor, you had seen us in our shirt sleeves, (for the weather was pretty hot,) pursuing our flying foes. After this, I cannot certainly gainsay the trouble of the crop, and they who are afraid of trouble, had better not attempt to grow roots. After all, the question is, will the crop pay for this trouble and expense? I am fully convinced that it will. Mine, in spite of its enemies, produced nearly 19 tons to the acre; the year before I had 28 tons to the acre in the same field. Yours, truly, B. M.

A FARMER IN DISTRESS.

A farmer in a neighboring county, who had been *dozing* for twenty or thirty years, and had made no improvement by fertilizing his fields, but had gone on the old-fashioned plan of reducing the staple of his soil, *waked up* a few years since, and limed the whole of his farm thoroughly, and that with magnesian lime, too. Now, what do you think has been the consequence of this proceeding? A few days since, with a sorrowful countenance, he informed the writer of this, that he had no pasture for his cows, and should not have till after harvest. The reason of so extraordinary a circumstance was asked; when he stated, that the field which, according to his usual rotation of crops would have been devoted to pasture, was so thickly set with grass, of such a luxuriant growth, that he had determined to keep it for mowing, in addition to his other mowing grounds. He, of course, has to feed on hay, and soil his cattle till after harvest; and this *disaster* has befallen him in consequence of liming his land and sowing grass seed much thicker than formerly! The plain fact is, that he has grown so much grass by his improved system, that he has no pasture; his fields are all mowing ground.

If the writers on the deleterious effects of magnesian lime, would travel through Bucks, Montgomery, Delaware, Chester, and Lancaster counties, they would witness effects of a similar kind with the above, on thousands of acres of land—land which, before the application of lime, produced but very scanty pasturage, but now is first rate mowing ground.—*Farmers' Cabinet.*

Effects of Different Colored Rays upon Vegetation.—Plants will grow most luxuriantly beneath glass of a blue color. Beneath yellow and red glasses the natural process is entirely checked. Indeed it will be found that at any period during the early life of a plant, its growth may be checked by exposing it to the action of red or yellow light.

This discovery is announced by Mr Hunt, the Secretary of the Royal Polytechnic Society, in England, who says in reference to it—"Blue glass admits the blue or chemical rays, to the exclusion, or nearly so, of all others; yellow glass admits only the permeation of the luminous rays; while red glass cuts off all but the heating rays, which pass it freely. Yellow and red rays are destructive to germination, whereas, under the influence of violet, indigo, or blue light, the process is quickened in a most extraordinary manner."

"The man that misses sunrise, loses the sweetest part of his existence. I love to watch the first tear that glistens in the opening eye of morning—the silent song the flowers breathe—the thrilling melody of the woodland minstrels, to which the modest brook trickles applause—these, swelling out the sweetest strain of sweet creation's matins, seem to pour some soft and merry tale into the daylight's ear, as if the world had dreamed a happy thing, and now smiled o'er the telling of it!"

There is more poetry in the above ten lines than is to be found in ten pages of some of the stuff which passes for poetry because it 'jingles' well in rythm.

NEW ENGLAND FARMER,
AND HORTICULTURAL REGISTER.

BOSTON, WEDNESDAY, MAY 25, 1842.

POOR FARMERS, HOW CAN YOU MAKE BOTH ENDS MEET?

The present year will not, apparently, be a very prosperous one, with many classes of our citizens who depend mostly upon the labor of their hands for an income. Compared with several years in the last ten, this will be, or is rather, one of stagnation in business. Men of most pursuits, (excepting those who rely upon salaries, fees or interest money,) will be comparatively straightened in their circumstances. The farmer, especially if he is in debt, is among those who will have to calculate closely, or he will be falling in arrears.

The productions of his lands are not likely to command high prices. It is true that the produce of the dairy, as yet, sells readily and at a fair price—but beef, pork, mutton and veal are 25, 50 or 100 per cent. lower than in some past seasons. Hay, grain, potatoes, &c. &c. are not high; and if the crops should be good the coming season, prices will probably be low. Interest money, where it must be paid, taxes, blacksmith's bills, and those due other mechanics, will be nearly as high as ever. Wages, we believe, have not fallen in the same ratio as most articles produced upon the farm; those farmers therefore who hire help, will be placed at disadvantage in this respect. But West India goods and cloths are low—these articles, which *must* be bought, have fallen nearly or quite as much as the produce of the farm. But since these are not a very heavy item in the farmer's expenses, the balance, on the whole, is against him. He cannot reasonably expect to make much money. If he can "hold his own," he will do well, under the circumstances. This he will not do unless he and his family are economical and industrious. The expenses, especially for luxuries, dress, &c., should be kept at the lowest point. The lands that have been planted should be faithfully tilled—every thing that the land produces must be taken good care of, and all proper and justifiable methods adopted for making the sales as great as possible, and the out-goes as small. These remarks are for that large class of farmers who are in debt, and those likewise who have their farms clear but nothing more.

RICHER FARMERS AND OTHERS, WHAT SHALL YOU DO?

To such as are more affluent, we should not proffer such advice as the above; for in doing it, we should be advancing principles which if rigidly adhered to, might for the time being, greatly curtail the employments and incomes of wheelwrights, carriage-makers, carpenters, painters, masons, manufacturers, shopkeepers, &c. &c. If the business of these is greatly diminished, they must retrench in the amount of farming produce which they take, or must run in debt for much that the farmer likes not to part with but for cash. Such an operation would, another year, convert many mechanics into farmers. The number of producers would be increased, and the number of purchasers lessened. This would be prejudicial to the farmers. It is only when other classes in society are prosperous, that farmers can flourish.

Therefore all farmers and others who can afford it, and yet be just to their creditors and families, act the part of good citizens, if they choose the times when business is dull, to erect and reframe buildings, to reclaim and improve lands, to get new carriages, new implements, new dresses, &c. &c. Thus they give employment to many who would otherwise fare hard—thus they help many to means with which to pay the farmer for his surplus produce.

PROTECTIVE DUTIES.

With a few temporary exceptions, the interests of all large classes in the community rise and fall together. Let manufactures flourish, and many hands are withdrawn from the field to the workshop—and the mouths which go with those hands, must be fed by the labors of those who remain upon the farms. This causes an increased demand in proportion to the supply; prices rise, and the farmer is better remunerated for his labor and investments. Business at such times is usually brisk in all its channels—mechanics, traders and all, find full employment.

The farmer's pursuit is the most important to human subsistence, and the farming population, by their numbers and worth, stand first among the classes. Their condition is the one to claim the first and highest regard—but when we come to consider the question how their interests can be best promoted—(we refer to pecuniary interests)—it is obvious that the causes which make the best market for their produce, are the matters to be most regarded in obtaining the correct answer. Such commercial regulations by the national government as will make the best home market for all that we raise, promise more benefit than any thing else that can be brought to bear upon the subject.

A discriminating tariff may lay duties upon either raw materials or manufactured goods, or both. A duty upon a raw material, as wool, for instance, may, *perhaps*, benefit the American farmer directly, by causing a less supply in the market; but there is a drawback to this benefit. The exclusion of a million pounds of foreign wool from our market, might increase the price of wool, and so benefit the wool grower here—but it would turn out from factories the hands necessary to manufacture that wool, would cause them to become farmers, and thus lessen the number of consumers compared with the producers of agricultural productions. Again, this million pounds shut out from our market, would lessen the price of wool in Europe, and thus enable the English manufacturer to furnish us cloths at lower rates than now. A duty upon the raw material alone, would let the price of cloths down so that our wool would not rise much. "One hand would wash the other;" perhaps they might not be equally clean, but there would be but little difference.

Indirectly, through the manufacturer, the farmer may get a surer promotion of his interests. A duty which should exclude from our markets most of the manufactures of Europe, and multiply manufacturing establishments here, would create in our midst a demand for agricultural products of all kinds—would increase the value of our lands, and in every way conduce to the farmer's prosperity. Especially would it be so, if both the raw material and the manufactured goods came in only under wisely adjusted duties.

Such policy as this might injure the navigating interests, perhaps, but no other important one.

It is through our own manufacturing interests that our agriculture can get its greatest aid; and therefore, the farmers are deeply interested in all movements in favor of manufactures. If these can but permanently flourish, agriculture will flourish also.

KEEP THE HOGS AT WORK.

While the hurry of planting lasts, farmers are too apt to leave the hog yard empty; but as soon as it is cleaned out in the spring it should be re-covered with the best material attainable for making manure. Put in leaves, straw, cornstalks, muck or whatever else can be procured, and set the swine at work forthwith. They will labor better now than at most other seasons of the year, and if furnished with the proper materials, will be expeditiously preparing your manure for the following year. Have a quantity of material near the yard at all times, so that a small quantity may be thrown in every few days through the warm season—In this way make much manure—but *not too much*—for there is a limit beyond which it is not profitable to shovel in and out. Not every thing becomes good manure by being thrown within the walls that confine the pigs. If well tended, one swine will make in a twelvemonth two cords and a half or three cords of manure. Seldom is it profitable to try to get more than that, and if the matter put into the sty is not quite good for the purpose, it is better not to get so much.

THE FROST.

On the night of Friday last (May 20,) there occurred a more severe frost in this region than is usual so late in the season. Our labors in the city called us away from the fields this morning before the sun extracted the frost, and consequently before it was possible to determine whether much harm would be done to young plants and fruits. Since the morning we have remained in the city, and of course can have no observations upon the subject to record.

When we left the farm, between five and six o'clock, the fields were white as with the whitest autumnal frosts, the grass was crisp under the foot, the surface of the ground in some spots was slightly crusted, and there was a thin coating of ice upon small pools of water.

What will be the effect upon fruits and plants? Many of the farmers are apprehensive of extensive damage. We suppose that cucumbers, melons, squashes, and beans may have been destroyed—but this loss, though inconvenient, is not heavy with those who have seed wherewith to plant again. Corn and potatoes when nipped, will usually start again and do well. Fruit *in blossom* we do not apprehend will be injured. For we never yet have known an instance in which we were satisfied that fruit had suffered harm from a *spring* frost. We have known seasons in which warm southerly winds, blowing while the trees were in full bloom, have dried up the farina and stopped the formation or setting of fruit. And at this time we should be as much disposed to believe that harm was done to the fruit by the warm winds of Thursday last, as by the frost of Friday night. But we do not yet apprehend serious harm from either to the hardier fruits.

But what power of resistance to cold the peaches, cherries, currants and the like possess, *after the fruit is formed*, and the blossom has withered, we have no satisfactory observations on which to give our opinion. We however think it great. Even where the *leaves* have wilted and perished, in some instances the *fruit* has come off from the cold unharmed. A wise Providence has ordinations and provisions, which often fulfil the promise of a harvest, even when men despair. In nearly all plants and trees suited to our climate, excepting a few annuals, which if cut down can be replanted, there is a vast power in the earlier stages of their growth, to withstand frost.

We write this on Saturday, (the day following the frost,) and before we can witness its full effects. Should our expectations be realized, they may be of service in persuading some fruit growers to be less alarmed by a cold night than they have been in past times.

MASS. HORTICULTURAL SOCIETY.

Saturday, May 21, 1842.

Dr. John C. Howard, Brookline, exhibited several bunches Black Hamburg Grapes—quite ripe, and finely colored, with very large berries.

THERMOMETRICAL.

Reported for the New England Farmer.

Range of the Thermometer at the Gardenof the proprietors of the New England Farmer, Brighton, Mass. in a shaded Northerly exposure, for the week ending May 22.

May, 1842.		5,A.M.	12, M.	7,P.M.	Wind.
Monday,	16	40	71	63	S.
Tuesday,	17	50	72	61	S. E.
Wednesday,	18	48	73	60	S.
Thursday,	19	54	78	56	W.
Friday,	20	42	45	39	S. E.
Saturday,	21	37	64	54	S. E.
Sunday,	22	47	57	55	E.

BRIGHTON MARKET.—Monday, May 23, 1842.

Reported for the New England Farmer.

At Market 220 Beef Cattle, 12 pairs Working oxen, 25 Cows and Calves, 200 Sheep and 650 Swine.

Prices.—*Beef Cattle.* Sales were quick and last weeks prices were fully sustained. We quote to correspond. A few extra $6 00. First quality, $5 50 a 5 75. Second quality, $5 50. Third quality, $4 75 a 5 25.

Working Oxen.—Sales 75, 80, 88, 92, and $95.

Cows and Calves. Sales 20, 25, 30, 35, and $38.

Sheep. Sales not made public.

Swine.—Lots to peddle 3 1-2 for sows, and 4 1-2 for barrows. Large barrows 3 1-2. At retail, from 4 to 5 1-2.

WHOLESALE PRICES CURRENT.

Corrected with great care, weekly.

SEEDS. Herds Grass, $2 75 to 3 00 per bushel. Red Top, 40 to 50 cents. Clover—Northern, 11 to 12c.—Southern, 9 a 10 c. Flax Seed, $2 00 per bushel. Lucerne, 25 c.per lb. Canary Seed, $4 50 a 5 00 per bushel.

GRAIN. Corn. Prime yellow flat 60c; do round 63c; white 58 a 60c per bushel; 10,000 bushels New-Orleans Corn sold at various prices, 45 a 52c per bushel, according quality; Southern Oats 44 a 46c; Northern do 47c per bushel; 600 bushels Richmond do, by auction, 43c; Rye scarce; small sales 73 a 75c per bushel.

Corn—Northern, bushel 65 to— —do. Round Yellow 63 a — —do. Southern Flat Yellow 60 a — —White do. 58 a — —Barley — a — —Rye, Northern, 73 a 75 —do. Southern, — a — —Oats, Southern, 44 a 46—Northern do. 47 to 48—Beans, per bushel 75 a 1 50.

FLOUR. The principal transactions consist of 1000 bbls. Genessee common brands, $6 44 a 6 50; 500 do fancy, $6 62 1-2; sound Ohio, 2200 bbls. $6 a 6 12 1-2; 500 bbls. do. one third unsound, $5 62 1-2; 300 bbls. Baltimore City Mills, $6 12, 4 mos; 500 do Fredericksburg, $6 25, 4 mos.

Baltimore, Howard Street, 4 mos. cr. $6 50 a — —do. wharf, $6 00 a — do. free of garlic, $6 25 a — —Philadelphia do. 4 mos. $6 25 a — —Fredericksburg, lowl'd 4 mos. $6 12 a 6 25—Alexandria, wharf mountain,— — a — —Georgetown, $6 25 a 6 75—Richmond Canal, $6 25 a 6 50—do. City, $7 00 a 7 25—Petersburgh, South side $7 00 a — —do. Country $6 00 a 6 25—Genesee, common, cash, $6 44 a 6 50— do fancy brands $6 50 a 6 62 — Ohio via Canal, $6 00 a 6 12—do do New Orleans, cash $6 (0 a —. Rye, $3 75 a 4 00—Indian Meal in bbls., $3 00 a 3 12.

PROVISIONS. Sales by auction 733 bbls. Western Mess Pork, 7 50 a $7 87 per bbl; 50 do Clear, 10 37 a $10 75 do; 20 do ordinary do, $9 25 do; 30 do Mess, 7 50 a $7 62 do; 35 do Prime, $5 50 a 5 62 do; 50 hhds and 100 bbls Shoulders, 2 1-2 a 2 3-4cts per lb; 100 bbls Western Mess Peef, $5 50 do; 7 bbls and 125 kegs Lard, 5 1-8 a 5 1-4cts per lb. cash.

Beef—Mess, 4 mo. new bbl. $9 00 a 9 50—Navy—$8 00 a — —No 1, $7 25 a 7 50—do Prime $4 50 a 5 00—Pork—Extra clear, 4 mo. bbl. $12 a — —do Clear $10 a 11 —do Mess $8 00 a 8 50 —do Prime $6 25 a 6 50—do Mess from other States 7 50 a 8 00.—do Prime do do, $6 00 a 6 50—do Cargo do do — a— —Clear do do $10 00 a 11 00—Butter, shipping 6 a 11—do store, uninspected, 10 a 14—do dairy, 15 a 17.

WOOL. Duty. The value whereof at the place of exportation shall not exceed 8 cts. per pound, free. All whereof the value exceeds 8 cts. per pound, 32 per ct. ad. val. and 4 cts per pound.

A sale of 15,000 lbs Pennsylvania was made to a neighboring manufacturer, at 44c. per lb.

Prime or Saxony Fleeces, washed, lb. 44 a 45 c.—American full blood, do 40 a 42—Do. 3-4 do 37 a 40—Do. 1-2 do 33 a 35—1-4 and common do 30 a 31 — Smyrna Sheep, washed, 20 a 25—Do. unwashed, 10 a 13—Bengasi do 8 a 10—Saxony, clean, — Buenos Ayres unpicked, 7 a 10—co. do. picked, 12 a 16—Superfine Northern pulled lamb 35 a 38—No. 1 do. do. do. 32 a 34—No. 2 do do do 21 a 24—No. 3 do do do 12 a 15.

HOPS. The English market was very firm at the last advices. The accounts from the plantations were quite favorable to the vine

1st sort, Mass. 1841 per lb 10 a 11.—2d do do do 8.

HAY, per ton, $19 to 22—Eastern Screwed $14 to 16

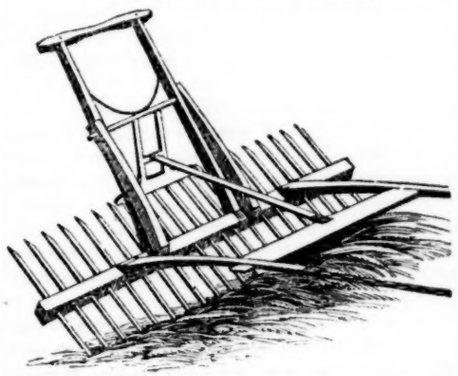
CHEESE—Shipping and 4 meal, 4 to 6c.—New 5 to 8.

EGGS, 12 a 16.

WANTED

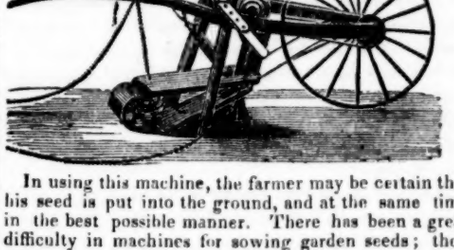
To hire from 15 to 50 acres of land with buildings, from 3 to 10 miles of Boston. Communication to the office of this paper will be attended to. 3t* May 25

REVOLVING HORSE RAKE.



This is one of the most useful and labor saving machines now in use. One man and a horse with a boy to lead, will rake on an average from 25 to 30 acres per day, with ease and do the work well There is a great advantage in this rake over all others, as the person using it does not have to stop the horse to unload the rake. For sale by J. BRECK & CO., No. 52 North Market st. May 22.

WILLIS'S LATEST IMPROVED SEED SOWER.



In using this machine, the farmer may be certain that his seed is put into the ground, and at the same time in the best possible manner. There has been a great difficulty in machines for sowing garden seeds; they are very apt to clog up, and the farmer might go over an acre of land and not sow a single seed; but not so with this; it is so constructed that it cannot possibly clog. In using this sower, the farmer can save one half of his seed, and do the work at less than one quarter the expense of the common way of sowing, and have it done in a much better manner; it opens the furrow, drops the seed, covers it over and rolls them down. It will sow any kind of Garden Seeds; say Ruta Baga, Mangel Wurtzel, Turnips, Carrots, Beets, Parsnips, Onions, &c. For sale at the New England Agricultural Warehouse and Seed Store, Nos. 51 and 52 North Market street, by JOSEPH BRECK & CO.

April 20

GARDEN AND FIELD SEEDS.

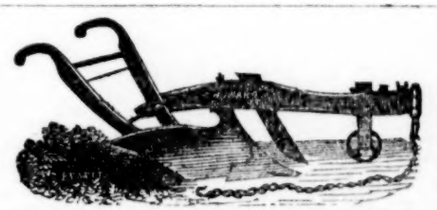
JOSEPH BRECK & CO. have received their full supply of Garden and Field Seeds, which they warrant to be pure and fresh, as follows:

Early Cedo Nulli Peas.	Early Horn do.
" Warwick do.	Mangel Wurtzel Beet.
" Dwarf do.	Sugar do.
" Washington do.	Long Red do.
" Frame do.	Early Turnip do.
Blue Imperial do.	Ruta Baga.
Marrowfat, &c.	Turnips in great variety.
White Altringham Carrot	Early and Late Beans of sorts.
Long Orange do.	

AGRICULTURAL IMPLEMENTS, &c.

The Proprietors of the New England Agricultural Warehouse and Seed Store No. 51 and 52 North Market street, would inform their customers and the public generally that they have on hand the most extensive assortment of Agricultural and Horticultural Tools to be found in the United States. Part of which are the following:

1000 Howard's Patent Cast Iron Ploughs	100 doz. Cast Steel Shovels.
300 Common do. do.	150 " Common do.
200 Cultivators.	100 " Spades.
100 Greene's Straw Cutters.	500 " Grass Scythes.
50 Willis' do. do.	300 " Patent Snaiths.
100 Common do. do.	200 " Common do.
100 Willis' Patent Corn Shellers.	500 " Hay Rakes.
50 Common do do.	200 " Garden do.
200 Willis' Seed Sowers.	200 " Manure Forks.
50 " Vegetable Cutters	300 " Hay do.
50 Common do. do.	500 Pair Trace Chains.
200 Hand Corn Mills.	100 " Truck do.
200 Grain Cradles.	100 Draft do.
100 Ox Yokes.	500 Tie up do.
1500 Doz. Scythe Stones.	50 doz. Halter do.
3000 " Austin's Rifles.	1000 yards Fence do.
March 17.	25 Grind Stones on rollers.



HOWARD'S IMPROVED EASY DRAUGHT PLOUGH.

Great improvements have been made the past year in the form and workmanship of these Ploughs; the mould board has been so formed as to *lay the furrow completely over, turning in every particle of grass or stubble, and leaving the ground in the best possible manner.* The length of the mould board has be n very much increased, so that the Plough works with the greatest ease, both with respect to the holding and the team. The Committee at the late trial of Ploughs at Worcester, say,

"Should our opinion be asked as to which of the Ploughs we should prefer for use on a farm, we might perhaps say to the inquirer, if your land is mostly light and easy to work, try Prouty & Mears, but if your *land is heavy, hard orrocky,* BEGIN WITH Mr. Howard's."

At the above mentioned trial the Howard Plough *did more work, with the same power of team, than any other plough exhibited.* No other turned more than twenty-seven and one half inches, to the 112 lbs. draught, while the *Howard Plough turned twentynine and one half inches, to the same power of team!* All acknowledge that Howard's Ploughs are much the strongest and most substantially made.

There has been quite an improvement made on the shoe, or land side of this Plough, which can be renewed without having to furnish a new landside; this shoe likewise secures the mould board and landside together, and strengthens the Plough very much.

The price of the Ploughs is from $6 to $15. A Plough, sufficient for breaking up with four cattle, will cost about $10 50, and with cutter $1, with wheel and cutter, $2 50 extra.

The above Ploughs are for sale, wholesale and retail, at the New England Agricultural Warehouse and Seed Store, Nos. 51 & 52 North Market Street, by

JOSEPH BRECK & CO.

April 20

POUDRETTE.

For sale 200 Barrels Poudrette, at $2 per barrel, by J. BRECK & CO, 51 and 52 North Market st., Boston.

May 18.

DAHLIAS.

For sale at the Agricultural Warehouse, No. 52 North Market street, a large assortment of Double Dahlias of the finest varieties. JOSEPH BRECK & CO.

Boston, May 3, 1842.

DAHLIA POLES.

JOSEPH BRECK & CO., offer for sale 1000 superior Dahlia Poles, with the bark pealed off, in bundles of 100, or by the dozen Boston, May 3, 1842.

FLOWER SEEDS.

JOSEPH BRECK & CO., Nos. 51 and 52 North Market street, offer for sale their usual variety of Flower Seeds, comprising all that are desirable for cultivation.

Boston, March 9th, 1842.

MISCELLANEOUS.

A Passage in the Life of a Drunkard.—The following quizzical story was told at a temperance meeting in Hartford, a few days ago, by a reformed toper. It opens rich, and as the man has become sober, one may now laugh over its absurdities with double relish. He said:

'I used to drink, and my wife used to jaw me about it. What do you get drunk for? said she: what do you jaw me for? said I. So we agreed, and made a bargain that I would not drink and she would not scold. For three long days we held on firm—no drinking, no scolding; but on the third evening, being in company with some good fellows, I took a horn, and when that was down, I right off wanted another, and in a very short time I found myself about *three sheets in the wind, and the other shivering.* (Laughter.) By and by it got to be time to go home; but, as you may well suppose, I dreaded to meet my wife, like the tooth-ache. (Laughter.) However, go I must; and so I staggered along, hoping to find my wife abed. (Laughter.) When I reached the house, I found it still lighted, and through the window I saw my wife up and waiting for me. (Laughter.) Thinks I, I can't go in yet, but I must wait till she goes to bed; so there I stood half freezing in the cold rain two hours. (Loud laughter.) At last she went to bed, and I crept in at the back door, stumbling over pails and chairs, but finally succeeded in getting to bed without disturbing her, (laughter;) but after dozing awhile, I awoke and found myself as dry as a fish, (laughter;) you know, brethren, how dry we all used to be in the night, after we 'd had a spree. (Laughter.) My wife always knew what was the matter with me, when I got up in the night to drink cold water. I hardly dared to get up, for fear of my wife; but my thirst was greater than I could bear; so out I crawled, and groped very softly after the water pail—but no water was there; I then felt round in the dark, on the tables and shelves for something to cool my burning thirst; soon I found a tin pan full of liquid something; I seized and put it to my mouth, and took a long and hearty draught—the liquid at the same time running out at each side of my mouth, down my cheeks. I thought the liquor tasted odd, and at that instant it flashed on my recollection that I had fixed some poison a few days before to kill rats with. (Laughter.) Horror-struck, I stood, my hair standing on end: it was death to scream out, for my wife would jaw me if she waked—(laughter)—and surely it would be death to hold still: but scream I must, and scream I did. (Riotous laughter.) "Wife! *wife! Hannah!* Halloa here! What was in that pan?" said I. "You are dry, are you?" said she. "What was in this pan?" shouted I, still louder. "What makes you dry?" screamed she. "*What was in this pan?*" yelled I, in perfect agony of fear. "What pan?" "Why, the pan on the shelf." "Oh, you brute! *you have drank up all my starch!*" (Tremendous laughter.) The next morning my shirt collar was pasted fast to my neck and cheeks, and it took half an hour to clear it off."

Mr Brown sat down amid the cheers of the whole audience.

"Father, is 'nt that man in what is called the 'spring time' of life?"

"Why, Fred?"

"Because he looks confounded *green.*"

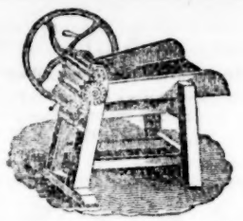
Frogs.—The Springfield Gazette records a curious fact illustrative of the migratory habits of frogs. A portion of the large lot in Springfield, now appropriated for a cemetery, has, on account of the low marshy land, been inhabited by a great number of frogs, which have been not a little disturbed by the recent improvements effected by draining and collecting the waters in running streams and fountains. About sunset on Friday evening last, large companies, numbering thousands of these frogs, were discovered making their way up the high grounds which surround these lowlands, and taking up their line of march in a northeasterly direction towards Goose pond, about a mile distant! A gentleman who witnessed it, says that the process of evacuation continued until 10 or 11 o'clock, and during this time the adjacent ground was literally covered with frogs, all moving in the same direction.

A touch of the high flown.—A student in one of our colleges, on his way home during vacation, stopped for the night at a tavern in the country. Upon alighting from his gig, he gave the following very clear and plain order to the ostler: "Boy, extricate that quadruped from the vehicle, stabulate him, donate him an adequate supply of nutritious aliment, satiate his thirst with the usual element, and when the Aurora of morn shall again illumine the oriental horizon, I will award you a pecuniary compensation for your amiable hospitality."—*Selected.*

A Match for Crockett.—One day last week, a man, whose name we have not ascertained with precision, but are told it was Cotton, was hunting pheasants in the neighborhood of Worromontogus Pond, in the east part of Hallowell, when he heard a great outcry from his dog. Going quickly in that direction, he saw that his dog had been seized by a bear, but had got loose and was running towards him, the bear being in pursuit. His gun was only loaded with shot, and before he could put a bullet in it, the bear was close upon him. The animal rose up before him, and was attempting to give him a not very fraternal hug, when the dog seized her behind. As she turned to strike a blow at the dog with her paw, the man struck her with his gun with all his strength; a second blow broke his gun, when the bear rushed upon him again. He seized the animal by one ear, and held her off at arm's length with his left hand. In the scuffle, they all came down together, the man uppermost, and still holding on. By good luck his right hand happened to fall upon a stone as large as he could conveniently grasp; with this he struck the bear with all his strength upon the head and nose, (a very vulnerable part in a bear,) and while he held his grasp with his left hand, he actually beat the bear to death with the other. The skin of the animal was shown in our office, the marks of the bruises made by the stone are to be seen on the skin, which is nearly cut through in several places about the head.

The ferocity of this bear is accounted for by the fact that she had cubs, which have since been seen. The man is large and athletic, and somewhat advanced in years. Will some one who knows him, send us his name?—*Augusta Me. Jour.*

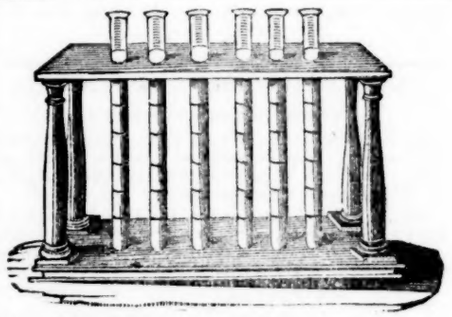
"I see a villain in your eye," said a constable to a suspected rogue. "Do n't use my face for a mirror," replied Smith.



GREEN'S PATENT STRAW CUTTER.

JOSEPH BRECK & CO. at the New England Agricultural Warehouse and Seed Store Nos. 51 and 52 North Market Street, have for sale, Green's Patent Straw, Hay and Stalk Cutter, operating on a mechanical principle not before applied to any implement for this purpose. The most prominent effects of this application, and some of the consequent peculiarities of the machine are:

1. So great a reduction of the quantum of power requisite to use it, that the strength of a half grown boy is sufficient to work it efficiently.
2. With even this moderate power, it easily cuts two bushels a minute, which is full twice as fast as has been claimed by any other machine even when worked by horse or steam power.
3. The knives, owing to the peculiar manner in which they cut, require sharpening less often than those of any other straw cutter.
4. The machine is simple in its construction, made and put together very strongly. It is therefore not so liable as the complicated machines in general use to get out of order.



LACTOMETERS—a simple instrument for testing the quality of milk. For sale by J. BRECK & CO.

DRAFT AND TRACE CHAINS.

400 pair Trace Chains, suitable for Ploughing.
200 " Truck and leading Chains.
200 " Draft Chains. For sale by J. BRECK & CO., No. 52 North Market st.

TYE UP CHAINS.

Just received by 500 Chains for tyeing up Cattle.

These chains, introduced by E. H. DERBY, Esq. of Salem, and Col. JACQUES, for the purpose of securing cattle to the stall, are found to be the safest and most convenient mode of fastening cows and oxen to the stanchion.

SITUATION WANTED

AS GARDNER—by one that has served a regular apprenticeship in Europe, and has had seven years' experience in this country. The best of reference given. Address J. D. at this office. March 9.

SUN DIALS.

Just received a few of Sheldon & Moore's, Sun Dials, a very neat and useful article for the purpose of giving the time of day in the garden or field. Price 75 cents. For sale by J. BRECK & CO., No 51 and 52 North Market St.

Sept 1.

NEW ENGLAND FARMER.

A WEEKLY PAPER.

Terms, $2 per year *in advance*, or $2 50 if not paid within thirty days.

N. B.—Postmasters are permitted by law to frank all subscriptions and remittances for newspapers, without expense to subscribers.

TUTTLE AND DENNETT, PRINTERS.